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## The estimation of the background induced by the misidentification of a jet as a photon by slice method at pp collider experiment

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The background induced by misidentification of a jet as a photon ( $jet \rightarrow \gamma$ ) is usually estimated using two-dimensional sideband method (ABCD-method) in collider experiments. This report is devoted to an alternative “slice method” of the estimation based on likelihood fit of  $jet \rightarrow \gamma$ , signal and other background yields using kinematic distributions in a phase-space region with relaxed requirements on corresponding variables. This method does not require optimization of regions definition, which results in much faster estimation. One of the main advantages of the considered method is that it takes into account data, signal and all other backgrounds distributions. It also takes into account the dependency on isolation. Both of these factors allow better estimation accuracy. The estimates of the considered method are confirmed by the standard ABCD-method.

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